

REMARKS

At the time of the office action, mailed April 21, 2003, the above-captioned patent application included 23 claims, two of which were in independent form. All of the claims stand rejected. Claims 45 and 57 were in independent form. Claims 51, 53 and 56 through 68 have been cancelled. Claims 45, the sole remaining independent claim, 46 through 50, 52, 54 and 55 have been amended.

The Examiner has made an objection because the Declaration has not been supplied for the above-captioned patent application. Applicant will forward a corrected Declaration in due course.

The specification has been amended in the prior amendments. Should minor errors be identified during the continued prosecution of this patent application, Applicant will notify the Examiner immediately.

Claims 50 through 53 and 57 through 68 have been rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which is not described in the specification. Applicant respectfully traverses this rejection. The Examiner states that claim 50 is rejected under 35 U.S.C. §112, first paragraph, because the specification does not disclose a control device having a sheet-like heating resistor and, more specifically, the data around the heating resistor. Turning attention to the specification, Applicant states that the control signal maintains the power voltage across the electrochromic mirror in the range of zero volts to 2.5 volts. Turning attention to page 10, Applicant states that the maximum control voltage on the electrochromic mirror is less than 25 percent of the nominal vehicle voltage. Coupled with the other values for the voltage in combination with the parenthetical information identifying the transistor having power consumption of .5 watts (page 9), Ohms Law equations $P=IV$ and $V=IR$ can be readily used to determine what an appropriate resistance would be for the heating element. This clearly does not fall within the category of undue experimentation. Therefore, Applicant respectfully traverses that portion of the rejection.

In addition, the Examiner states that the specification also fails to provide sufficient data

on the transistor Q. Given the above, and the fact that Figures 4A and 4B depict the transistors as junction field effect transistors, or more commonly known as JFETs, basic textbook resources can identify the parameters of such transistors consuming such power. Therefore, Applicant respectfully traverses this portion of the rejection. Many of the remaining claims are cancelled rendering the rejections thereto moot. Therefore, Applicant respectfully traverses the entire rejection of claims 50 through 53 and 57 through 68 under 35 U.S.C. §112, first paragraph, as these claims that are remaining are in condition for allowance.

The Examiner has rejected claims 45 through 68 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art the relevant art that the inventors had possession of the claimed invention. In particular, the Examiner states that the specification does not support two types of voltages being applied to the electrochromic mirror. Applicant has amended the claims to remove any recitation of two separate voltages. Claim 57 has been cancelled and therefore, Applicant respectfully traverses this rejection.

Claims 48 and 60 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses this rejection. With respect to claim 60, the rejection is rendered moot as claim 60 has been cancelled.

The Examiner has rejected claim 48 stating that the terms "said control signal" lacks proper antecedent basis. Claim 48 has been amended to depend from claim 47 which properly sets forth the control signal to which claim 48 now depends. Therefore, Applicant respectfully traverses this rejection as claim 48 is in condition for allowance.

Claims 45 through 47, 49, 54 and 55 are rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent 5,659,423 ("the '423 patent"). Applicant respectfully traverses this rejection.

The '423 reference discloses a rearview mirror system 10 having a variable reflectance assembly 14 that includes an electrochromic mirror assembly. The mirror assembly includes a

control system 26 having a first light sensor 28 and a second light sensor 30. A circuit 32 produces a drive signal which is applied to the electrochromic mirror element 16 to vary the reflectance level thereof. The circuit 32 is secured to the mirror assembly 10 behind a support 23 for the electrochromic mirror element 16.

The circuit 32 includes a transistor Q2 which is connected to the circuit 32 in parallel with the electrochromic mirror element 16. The transistor Q2 controls the output of the electrochromic mirror element 16. More specifically, the amount that the transistor Q2 varies determines the coloration voltage of the electrochromic mirror element 16 due to the series connection between the electrochromic mirror element 16 and a resistor R24, which extends between the electrochromic mirror element 16 and the voltage source for the circuit 32.

Claim 45, as amended to clarify the invention, claims a rear vision system used for a vehicle. The rear vision system includes an electrical circuit that is electrically connected to the vehicle power supply and the electrochromic mirror. The electrical circuit includes a resistive heating element that is fixedly secured to the opposing rear side of the electrochromic mirror allowing thermal energy to transfer therebetween. When a control element reduces the voltage applied across the electrochromic mirror to control the reflective properties thereof, the heating element receives electrical current to dissipate the voltage in the form of thermal energy to heat the electrochromic mirror.

Although the '423 reference discloses a rear view mirror assembly, including electrochromic mirror element 16 that is in series with a resistor R24, the resistor R24 is not a resistively heating element fixedly secured to the opposing rear side of the mirror element. Therefore, claim 45, and all claims depending therefrom, overcome the rejection under 35 U.S.C. §102(b) and are in condition for allowance.

Claim 56 has been rejected under 35 U.S.C. §103(a) as being unpatentable over the '423 reference. Applicant has cancelled claim 56, rendering the rejection thereto moot.

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It is respectfully submitted that this patent application is in condition for allowance, which allowance is respectfully solicited. If the Examiner has any questions regarding this amendment or patent application, the Examiner is invited to contact the undersigned.

Respectfully submitted,



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